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DATE MAILED: 05/01/2003

| APPLICATION NO.       |   | FILING DATE  | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------|---|--------------|----------------------|---------------------|------------------|
| 09/725,572 11/30/2000 |   | 11/30/2000   | Keun No Park         | 2658-0246P          | 9754             |
| 2292                  | 7590                                      | 05/01/2003   |                      |                     |                  |
|                       |   | KOLASCH & BI | EXAMINER             |                     |                  |
|                       | PO BOX 747<br>FALLS CHURCH, VA 22040-0747 |              |                      | ROMAN, ANGEL        |                  |
|                       |   |              |                      | ART UNIT            | PAPER NUMBER     |
|                       |   |              |                      | 2812                |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.  | Applicant(s)   |  |  |  |  |
|---|--|--|--|--|--|--|
|   | 09/725,572   | PARK, KEUN NO  |  |  |  |  |
| Office Action Summary   | Examiner   | Art Unit   |  |  |  |  |
|   | Angel Roman  | 2812   |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |  |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply lf NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute,  - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status | i6(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |  |
| 1) Responsive to communication(s) filed on <u>09 F</u>  | ebruary 2003 .   |  |  |  |  |  |
| 2a)⊠ This action is <b>FINAL</b> . 2b)□ Thi   | s action is non-final.   |  |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |  |  |  |  |  |  |
| Disposition of Claims   |  |  |  |  |  |  |
| 4) Claim(s) 1.4 and 6-15 is/are pending in the app  |  |  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |  |  |  |  |  |  |
| 5)⊠ Claim(s) <u>1,4 and 6-12</u> is/are allowed.  |  |  |  |  |  |  |
| 6)⊠ Claim(s) <u>13 and 14</u> is/are rejected.  |  |  |  |  |  |  |
| 7) Claim(s) <u>15</u> is/are objected to.   |  |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or   | election requirement.  |  |  |  |  |  |
| Application Papers  |  |  |  |  |  |  |
| 9) The specification is objected to by the Examiner   |  |  |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>30 November 2000</u> is/ard   | •  | •  |  |  |  |  |
| Applicant may not request that any objection to the   |  |  |  |  |  |  |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.  |  |  |  |  |  |  |
| If approved, corrected drawings are required in reply to this Office action.  |  |  |  |  |  |  |
| 12) The oath or declaration is objected to by the Exa   | aminer.  |  |  |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120   |  |  |  |  |  |  |
| 13) Acknowledgment is made of a claim for foreign   | priority under 35 U.S.C. § 119(a)  | )-(d) or (f).  |  |  |  |  |
| a)⊠ All b)□ Some * c)□ None of:   |  |  |  |  |  |  |
| <ol> <li>Certified copies of the priority documents</li> </ol>  | have been received.  |  |  |  |  |  |
| <ol><li>Certified copies of the priority documents</li></ol>  | have been received in Application  | on No  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).   |  |  |  |  |  |  |
| * See the attached detailed Office action for a list of   | ·  |  |  |  |  |  |
| 14) Acknowledgment is made of a claim for domestic  |  |  |  |  |  |  |
| <ul> <li>a)  The translation of the foreign language prov</li> <li>15) Acknowledgment is made of a claim for domestic</li> </ul>  |  |  |  |  |  |  |
| Attachment(s)   |  |  |  |  |  |  |
| )   | 5) Notice of Informal P  | (PTO-413) Paper No(s) atent Application (PTO-152)  |  |  |  |  |
|   |  |  |  |  |  |  |

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 13 and 14 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Shimizu et al. U.S. Patent 6,043,162 A.

Shimizu et al. discloses a method to prevent generation of contaminating particles in a chamber, comprising; evacuating an ordinary gas within said chamber (see column 4, lines 13 and 14); injecting a treatment gas into said chamber to treat a surface of said substrate (see column 4, lines 14 and 15); increasing a pressure in said chamber to greater than or equal to atmospheric pressure by injecting a moisture displacing gas (nitrogen) into the chamber; and withdrawing said treatment gas from said chamber while injecting the moisture displacing gas into said chamber and preventing atmospheric air from entering the chamber (see column 4, lines 41-50).

## Allowable Subject Matter

3. Claims 1, 4 and 6-12 are allowed.

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4. Claim 15 is objected to as being dependent upon a rejected base claim, but

would be allowable if rewritten in independent form including all of the limitations of the

base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject

matter: The prior art either singularly or in combination failed to anticipate or render

obvious the limitations of increasing the pressure within the chamber to greater than or

equal to atmospheric pressure by injecting a nitrogen gas into the chamber and drawing

out the surface treatment gas from the chamber while injecting the nitrogen gas, the

surface treatment gas converting the substrate surface into an organic material as

required by claim 1.

Response to Arguments

6. Applicant's arguments with respect to claims 1, 4 and 6-15 have been considered

but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. Mandal and Kirlin et al. disclose processes wherein a substrate

surface is converted to organic by using a surface treatment gas and the surface

treatment gas is drawn out of a chamber by using a nitrogen purging process.

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8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

- 9. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
- 10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angel Roman whose telephone number is (703) 306-0207. The examiner can normally be reached on Monday-Friday 8:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Niebling can be reached on (703) 308-3325. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7724 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (703) 308-

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AR

April 28, 2003

John F. Niebling

Supervisory Patent Examine? Technology Center 2800